In the claims :

Please cancel claims 2 and 9 and amend claims 1, 3, 4, 7, 8, 10, 11, 13, 14, 15 and 20 as follows:

1. (Amended) A method for coating solid particles comprising the steps of

(a) adding solid particles to a liquid coating solution to form a liquid coating slurry containing a coating precursor, solvent for the precursor and the solid particles dispersed therein whereby the precursor is not precipitated until after spraying,

(b) spraying the coating slurry to form droplets containing at least one particle,

(c) passing the droplets through a zone where the droplets are dried and form dry coated particles wherein the coating material is formed from the precursor, and

(d) heat treating the coating material on the particles to remove volatile matter from the coating material.

3. (Amended) The method of claim 1 wherein temperature in the zone is elevated and the heat treatment of the coated particles is conducted at a temperature above the elevated temperature in the zone, and the precursor is selected from the group consisting of alkoxides, nitrates, sulfates, acetates, hydroxides, hydrates, chlorides, other precursors that can be dissolved in aqueous or non-aqueous liquids and mixtures thereof.

4. (Amended) The method of claim 3 wherein the particles are less than about 100 microns in diameter, dilution ratio in the coating

slurry of milliliters of coating solution per gram of phosphor particles is 100-5000, thickness of the coating material on the particles is 1-1000 nm, velocity of the droplets in the zone is 0.1-1000 cm/sec and residence of the droplets in the zone is from instantaneous to a fraction of a minute.

7. (Amended) The method of claim 6 wherein the residence time of the droplets through the zone is 1-5 seconds, the particles are phosphor particles, and said heat treating step is carried out at 50-2000°C over a period of 0.01-48 hours.

8. (Amended) The method of claim 7 wherein said heat-treating step is carried out at 300-1500°C over a period of 0.1-24 hours.

10. (Amended) The method of claim 8 wherein the coating material is selected from the group consisting of indium tin oxide, silicon dioxide, magnesium oxide, sodium phosphate, yttrium-europium oxide, and mixtures thereof; and the precursor is selected from the group consisting of indium methyl (trimethyl) acetyl acetate, tin isopropoxide, tetraethyl orthosilicate, magnesium nitrate, yttrium chloride, europium chloride, sodium phosphate and mixtures thereof.

11. (Amended) The method of claim 10 wherein the particles are ZnS:Ag,Cl phosphor particles.

13. (Amended) A method comprising the steps of

(a) preparing a liquid precursor solution by dissolving a coating precursor in a liquid precursor solvent;

(b) mixing the precursor solution with a diluent, that is miscible with the precursor solvent, to form a liquid coating solution;

(c) adding with mixing solid particles to the coating solution to form a liquid coating slurry containing the coating precursor dissolved in the coating solution and the solid particles dispersed therein whereby the precursor is not precipitated until after spraying;

(d) spraying the coating slurry to form droplets containing at least one particle;

(e) passing the droplets through a zone where the droplets are dried and form dry particles coated with a coating material formed from the precursor solution;

(f) heat-treating the coating material on the particles to remove volatile matter on the coating material and to convert the coating material from electrically non-conducting amorphous to electrically conducting crystalline and/or to improve integrity of the coating material.

14. (Amended) The method of claim 13 wherein condition of the coating slurry is such that no coating material is deposited on the particles prior to said spraying step.

15. (Amended) The method of claim 13 wherein temperature in the zone is elevated and the heat treatment of the coated particles is conducted at a temperature above the elevated temperature in the zone, and the precursor(s) is selected from the group consisting of alkoxides, nitrates, sulfates, acetates, hydroxides, hydrates, chlorides, other precursors that can be dissolved in aqueous or nor-aqueous liquids, and mixtures thereof.